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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,347

06/19/2006

Hidenori Ikeno

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07/08/2009

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EXAMINER

SHUMATE, ANTHONY R

ART UNIT

PAPER NUMBER

1797

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,347	Applicant(s) IKENO ET AL.	
	Examiner ANTHONY SHUMATE	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-19 is/are rejected.
- 7) ☒ Claim(s) 17-19 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The Amendment filed 5 March 2009 has been entered and fully considered.
2. Claims 17-19 are pending, of which claims 17-19 were amended. The amendments of claims 17-19 are supported by the originally filed disclosure.
3. The previous drawing objection is withdrawn in light of Applicant's amendments to the specification.
4. The previous specification objections are withdrawn in light of Applicant's amendments to the specification.

Claim Objections

5. Claims 17-19 are objected to because of the following informalities:
Respectively, claim 17 has the phrase "ellipitcal" which is misspelled. Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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7. Claims 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over SEXTON (US 2,853,153) in view of DELANY (US 4,701,196), BANDLOW (US 3,496,704), TEXTORIS (US 3,722,973), and SIGAL (US 2,695,831).

For instant claims 17-19 the following in this 103(a) section is a general analysis of the claims.

For instant claims **17**, **18** and **19**, SEXTON implies the cartridge element (the filter within filter cell 20) is slid into the duct SEXTON teaches at the figures and column 2 lines 46-52 filter cells 20 are inserted into and removed from the housing 10 (duct) through an access opening arranged in the front wall 16 and normally covered by a sealing plate 27. Also, SEXTON implies the device lifts the cartridge element (the filter within filter cell 20) up and bring the cartridge element into attachment with the duct, since SEXTON teaches at the figures and column 2 lines 30-46, The marginal edges of the cells 20 are compressed between an inwardly extending peripheral flange 22 mounted in the upper end of the housing 10 and an open faced presser frame 23 vertically moved against the lower edges of the cells by a suitable adjusting mechanism; and The adjusting mechanism shown includes a horizontal screw 24 journalled on suitable brackets in the housing 10 and having oppositely threaded end portions; and Each end portion carries a nut 25 pivotally connected to one end of a toggle 26 having its opposite end pivotally connected to, the frame 23; and Rotation of the screw 24 in one direction moves the nuts 25 apart to raise the presser frame 23.

It is the Examiners position that a drawer can be defined as a boxlike compartment in furniture that can be pulled out and pushed in. Also, it is Examiners position that though SEXTON does not specifically describe the filter cells as drawers that the filter cells are drawers, since the filter cells fit the definition of a drawer and SEXTON teaches at column 1 lines 45-53 that the precleaner which is an air filter is a drawer. Also, DELANY teaches at the figures and the abstract an inner filter-holding drawer (7) is provided for easy insertion and removal from the open front casing portion.

In further analysis of instant claims **17**, **18** and **19**, SEXTON does not specifically teach inclined elliptical holes in the guiding members having a major axis that inclines upwardly in the longitudinal direction of the guiding members. But, SIGAL teaches at the figures and column 2 lines 20-60 inclined elliptical holes (slots 34 and 35) in the guiding members (supports 25 and 26) having a major axis that inclines upwardly in the longitudinal direction of the guiding members (supports 25 and 26) towards the rear of the table (direction of attachment of a cartridge to the duct). Also, SIGAL teaches at the figures and column 2 lines 75-80 that the design of the slots imparts both horizontal and vertical movement to the drawer. It would have been obvious to one of ordinary skill in the art to provide the drawer mechanism of SIGAL in place of the press of SEXTON, since doing so would simplify the movement of SEXTON device; providing the drawer mechanism of SIGAL for the horizontal and vertical motion of SEXTON would allow a single slide motion to insert the drawer (filter cell 20)

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where as the device of SEXTON originally requires a slide motion and a crank motion to insert and lift the filter cell 20 (drawer).

Also for instant claims **17**, **18** and **19**, SEXTON does not specifically teach sliding rails. But, TEXTORIS teaches at the figures and the abstract and column 5 lines 5-37 and column 3 lines 1-37 a drawer flange 40 and lower glide bracket 45 which ride on flange 19 and 21 which are a part of channel 13 (sliding rail). Similarly, DELANY teaches at the figures and the abstract the drawer end walls (44, 45) include external grooves (52) which slide over rails (56). Furthermore, TEXTORIS teaches at the figures and the abstract and column 3 lines 35-65 the drawer moving vertically held upon pivotal link 26, and pivotal links 26 and 27 are attached to the mounting plate 24 (guiding member). Similarly, SIGAL teaches at the figures and column 2 lines 20-81 the drawer held by the pins 22 and 23 moves vertically, and the pins 22 and 23 are attached to the supports 25 and 26 (guiding members). As well, SIGAL teaches at the figures and column 2 lines 10-25 the pins 22 and 23 in the plate 21. Similarly, TEXTORIS teaches at the figures and column 3 lines 40-65 the pivotal links 26 and 27 attached to the inside wall 16. Also, BANDLOW teaches at the figures and column 3 lines 35-50 the tracks 22 rollably support the drawer on the guide rollers 20 (sliding rail) and the drawer is guided and rollably supported for movement to an extended position. So, it would have been obvious to provide the rectilinear movement mechanism (sliding rails) of TEXTORIS which mainly comprises of channel 13 and glides with the combination of drawer mechanism of SIGAL and filter cell 20

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of SEXTION, since extending a drawer's position provides easier access to the contents of the drawer, and BANDLOW teaches at the figures and column 3 lines 35-50 that tracks 22 rollably support the drawer on the guide rollers 20 (sliding rail) and the drawer is guided and rollably supported for movement to an extended position.

For instant claims 17, 18 and 19 the following in this 103(a) section is a more detailed analysis of the claims and is supported by the general analysis of the claims above in this 103(a) section.

For instant claims **17**, 18 and 19, SEXTON implies at the figures and column 2 lines 20-50 guiding member (frame 23) fixed in a longitudinal direction under a bottom of an elongated duct (conduit 17). Also, SIGAL implies at the figures and column 2 lines 20-50 spaced guiding members (25 and 26) that are fixed in a longitudinal direction.

For instant claims **17**, 18 and 19, SIGAL teaches at the figures inclined elliptical holes in the guiding members having a major axis that inclines upwardly in a direction of toward the rear of the table (a direction of attachment of a cartridge to the duct).

Also for instant claims **17**, 18 and 19, SIGAL implies rail (plate 21) located in the guiding member (25) having connecting holes adjacent the inclined elliptic holes in the guiding member, coupling devices (pins) that extend through the inclined elliptical holes and the connecting holes to couple the rail to the guiding

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member, since SIGAL teaches at the figures and column 2 lines 20-65 pin 23 in the plate 21 is slidably inserted in the upper slot 34 (which is a part of 25) and the pin 22 similarly inserted in the lower slot 35 (which is a part of 25).

Also for instant claims **17**, **18** and **19**, SIGAL implies at figure 3 and column 1 lines 55-65 and column 2 lines 20-65 the coupling devices (pins) being slidable in the inclined elliptical holes (34 and 35) and being located at a lower part of the inclined elliptical holes when the drawer is in an open position (analogous to claimed position the cartridge element is detached from the duct).

Additionally for instant claim **17**, SIGAL implies at figure 3 and column 1 lines 55-65 and column 2 lines 20-65 the coupling devices (pins) being slidable in the inclined elliptical holes (34 and 35) and at an upper part of the inclined elliptical holes (34 and 35) when the drawer is in a closed position (analogous to claimed position when the cartridge element is attached to the duct).

Furthermore for instant claims **17**, **18** and **19**, the figure 7 depicts and the specification describes at page 11 paragraph 2 sliding member (16) as a means for installing a cartridge element (15) between the sliding rails (13) for movement with the rails. Instant claim **18** describes that the sliding member (16) has a hole. SEXTON depicts at figure 2 the filter cell (20) is a container with filter material and an upper and lower holes. A structural similarity between the sliding member (16) and the container of the filter cell (20) of SEXTON is that they both have a hole.

Also for instant claims **17**, **18** and **19**, TEXTORIS teaches at the figures and the abstract and column 3 lines 1-5 and column 3 lines 35-65 channel 13 (sliding rails) are slid under the surface of the furniture.

Additionally for instant claims **17**, **18** and **19**, SIGAL teaches at the figures and column 2 lines 23-81 the coupling devices (pins 22 and 23) slide in the inclined elliptical holes to lift (i.e vertical movement of) the drawer.

For instant claims **17**, **18** and **19**, SEXTON does not specifically teach wherein a sliding member that has a hole in which a cartridge element is inserted. But, SEXTON depicts at figure 2 the filter cell (20) is a container with filter material and an upper and lower holes. Therefore, the filter cell of SEXTON is structurally capable of wherein the container of the filter cell (sliding member) has a hole in which a filter (cartridge element) is inserted.

Additionally for instant claims **17**, **18** and **19**, in analysis of the cartridge element is supported by the rails, DELANY teaches at the figures and the abstract the drawer end walls (44, 45) include external grooves (52) which slide over rails (56). Similarly, TEXTORIS implies at the figures and the abstract and column 3 lines 1-5 and column 3 lines 35-65 the drawer is supported by the channel 13 (rails).

Also for instant claims **17**, **18** and **19**, DELANY teaches at the figures and the abstract that the drawer (7) is between the rails (56). Similarly, TEXTORIS

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implies at the figures and the abstract and column 3 lines 1-5 and column 3 lines 35-65 the drawer is between the channel 13 (rails)

For instant claims 17, 18 and **19**, SEXTON teaches at the figures and column 2 lines 45-52 a filter (plate-type cartridge element).

Response to Arguments

8. Applicant's arguments, see page 7 paragraph 4, filed 5 March 2009, with respect to the rejection(s) of claim(s) 17-19 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of SEXTON (US 2,853,153) in view of DELANY (US 4,701,196), BANDLOW (US 3,496,704), TEXTORIS (US 3,722,973), and SIGAL (US 2,695,831), necessitated by amendment.

9. Applicant's remaining arguments with respect to claims 17-19 have been considered but are moot in view of the new ground(s) of rejection necessitated by amendment.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. FREDERICK (US 2,565,845) 4 November 1946 Drawer with Rails.

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- B. ANDREWS (US 3,593,503) 20 July 1971 Filtering Apparatus.
- C. MACDONNELL (US 3,830,042) 20 August 1974 Rectangular Filter Bag.
- D. WILSON (US 5,156,660) 20 October 1992 Filter Apparatus.
- E. MOORE (US 6,613,115) 2 September 2003 Conical Dust Collector.
- F. NEUMANN et al. (US 4,472,184) 18 September 1984 Support and Holding Frame for Air Filtering Element.
- G. MILLARD (US 4,746,339) 24 May 1988 Pleated Filtering Apparatus.
- H. SCHNEIDER et al. (US 2002/0112458 A1) 22 August 2002 Air Filtering System
- I. RESSE (US 3,627,398) 14 December 1971 Storage Apparatus.
- J. WITTEMEIER (US 1,521,576) 5 January 1921 Air Filter Arranged on an Incline.
- K. ROGGERO (US 2,547,597) 23 May 1946 Shelving Structure.
- L. MERRYWEATHER (US 1,841,250) 10 September 1928 Furnace Filter.

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

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mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY SHUMATE whose telephone number is (571)270-5546. The examiner can normally be reached on M-Th 9-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571)272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DUANE SMITH/

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Supervisory Patent Examiner, Art
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/A.S./

Examiner Art Unit 1797